

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,176	03/01/2005	Amjad Mohmood Mohammed	WW/3-22336/PCT	8338
•=•	7590 03/20/200 LTY CHEMICALS CO	EXAMINER		
PATENT DEP	ARTMENT	HRUSKOCI, PETER A		
540 WHITE PLAINS RD P O BOX 2005			ART UNIT	PAPER NUMBER
TARRYTOWN	I, NY 10591-9005	1724		
	·			
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		03/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary		Application No.	Applicant(s)			
		10/526,176	MOHAMMED ET AL.			
		Examiner	Art Unit			
		Peter A. Hruskoci	1724			
Period for I	The MAILING DATE of this communication app Reply	ears on the cover sheet with the c	orrespondence address			
WHICH - Extensio after SIX - If NO pe - Failure to Any reply	RTENED STATUTORY PERIOD FOR REPLY EVER IS LONGER, FROM THE MAILING DA ns of time may be available under the provisions of 37 CFR 1.13 (6) MONTHS from the mailing date of this communication. riod for reply is specified above, the maximum statutory period we reply within the set or extended period for reply will, by statute, or received by the Office later than three months after the mailing latent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tirr  11 apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠ R	esponsive to communication(s) filed on <u>01 Ma</u>	arch 2007 and 23 May 2005.				
	This action is <b>FINAL</b> . 2b) This action is non-final.					
3) <u></u> Si	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition	of Claims					
4a 5)	aim(s) 1-20 is/are pending in the application.  Of the above claim(s) 11-19 is/are withdraw aim(s) is/are allowed.  aim(s) 1-10 and 20 is/are rejected.  aim(s) is/are objected to.  aim(s) 1-20 are subject to restriction and/or e  Papers  e specification is objected to by the Examiner e drawing(s) filed on is/are: a) acception and on the conficent may not request that any objection to the conficent may not request that any objection to the conficent may not request that any objection to the conficence is/are:	election requirement.				
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
	e oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.			
Priority und	ler 35 U.S.C. § 119					
a)⊠ . 1. 2. 3.	knowledgment is made of a claim for foreign All b) Some * c) None of:  Certified copies of the priority documents  Certified copies of the priority documents  Copies of the certified copies of the priori application from the International Bureau the attached detailed Office action for a list of	have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage			
Attachment(s)						
2) 🔲 Notice of 3) 🔯 Informati	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PTO-948) On Disclosure Statement(s) (PTO/SB/08) O(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te			

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-10 and 20 drawn to a method.

Group II, claims 11-19, drawn to a composition.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, a special technical feature which these claims share does not define a contribution over the prior art. For example, the claims of Groups I and II share a specific composition as the special technical feature, which is considered to lack novelty or an inventive step in view of Shepperd et al. 5,750,035 (see col. 3 line 39 through col. 7 line 50).

During a telephone conversation with Shiela A. Loggins on 3/13/07 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-10 and 20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

Art Unit: 1724

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The disclosure is objected to because of the following informalities: In the specification on page 2 "monmer", and on page 5 "Figure 2" are erroneous.

Appropriate correction is required.

Claims 1-10 and 20 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1 "high" and "otherwise entrapped", and in claim 2 "low" are vague and indefinite because it is unclear how these terms further limit the claims. Claim 1 is considered incomplete because it is essential that the instant method include a step of dewatering the suspension. In claim 6 "an" is erroneous and should be changed to -a. In claim 10 "the thickened suspension" lacks clear antecedent basis. Claims 3-5, 7-9, and 20 depend from the above claims.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Shepperd et al. 5,750,035. It is submitted that Sheppard et al. disclose (see col. 3 line 39 through col. 7 line 50) a method for dewatering suspensions as recited in the instant claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1724

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard et al. as above, and further in view of Ghafoor et al. 6,001,920. The claims differ from Sheppard et al. by reciting that the coagulant and flocculant have specific IV's. Ghafoor et al. disclose (see col. 2 line 60 through col. 6 line 36) that it is known in the art to utilize cationic coagulant and flocculant polymers having the recited IV's, to aid in treating suspensions. It would have been obvious to one skilled in the art to modify the method of Sheppard et al. by utilizing the recited IV's in view of the teachings of Ghafoor et al., to aid in dewatering the suspension.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard et al. as above, and further in view of Le Du et al. 4,565,635. The claim differs from Sheppard et al. by reciting that the composition includes a wetting agent. Le Du et al. disclose (see col. 4 line 67 through col. 6 line 17, and col. 9 line 3 through col. 12 line 42) that it is known in the art to utilize a surfactant or wetting agent in a composition including polymeric and inorganic flocculating agents, to aid in flocculating an aqueous media. It would have been obvious to one skilled in the art to modify the method of Sheppard et al. by utilizing the recited wetting agent in view of the teachings of Le Du et al., to aid in dewatering the suspension.

Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard et al. as above, and further in view of Sato et al. 5,776,362. The claims differ from Sheppard et al. by reciting that the suspension is subjected to filtration under pressure, and the inorganic coagulant is polyaluminum chloride. Sato et al. disclose (see col. 2 line 22 through col. 4 line 44, and Application Example 1) that it is known in the art to utilize cationic polymers

Art Unit: 1724

and polyaluminum chloride to aid in filtering sludge under pressure. It would have been obvious to one skilled in the art to modify the method of Sheppard et al. by utilizing the recited filtration and inorganic coagulant view of the teachings of Sato et al., to aid in dewatering the suspension.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

> **Primary Examiner** Art Unit 1724